Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.9
P696
Reserve

WEEKLY STATION REPORTS

OF THE DIVISION OF

DRY LAND AGRICULTURE

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

JAN 1936

722561

566389

Not for publication without
prior consent of this division.

REPORT FOR THE MONTH OF JANUARY, 1936.

JUDITH BASIN:

The mean temperature for January was 18° as compared to the average mean of 21°. There was but little moisture during the month, the amount not being sufficient to be of benefit. The total precipitation for the three months November - January is only 0.52 inch. There were four or five days during the month when soil blowing was serious and considerable soil was removed from fallow fields. The depth of the snow at the close of the month was only about 2 inches, with most fallow fields swept bare.

Maximum temperature, 56°; minimum, -14°; precipitation, 0.26 inch.

HUNTLEY:

January has been moderately cool throughout the month, although at no time were temperatures very low. Minimum temperatures of zero or below occurred on 10 days, the lowest being -16° on the 5th. Precipitation as showers and light snows occurred on 12 days of the month, the greatest amount falling in 24 hours being 0.28 inch. The total precipitation exceeded the average by 0.22 inch. During the fore part of the month most of the snow melted soon after falling leaving the ground bare, but for the last week or 10 days the ground was covered almost constantly.

The appearance of winter wheat is no different from that reported a month ago. The soil is frozen below the depth of seeding and as yet has not cracked open as it did a year ago. Wind movement has been low, so that such snow as has fallen has not blown off the plots. There has been a marked difference in the rate of melting of snow on bare ground as compared with that covered with stubble or grass. The plots partially shaded with stubble have retained the snow for as much as a day longer than fallow plots.

Maximum temperature, 55°; minimum, -16°; precipitation, 0.98 inch.

SHERIDAN:

Although there were two short periods of quite warm weather, and no extremely low temperatures were recorded during the month, the average mean temperature was about 1° below the station average for January. Precipitation for the month was slightly over two-thirds the station average for January. There was a light covering of snow on the ground the greater part of the month, but the maximum depth at any one time was only from 3 to 5 inches. Most of the snow melted during the warm weather around the 23rd. In nearby sections where there was more snow, melting was just sufficient to form an ice sheet over the range. Wind movement was just average for the month.

Maximum temperature, 54°; minimum, -12°; precipitation, 0.44 inch.

DICKINSON:

Steady cold weather continued all month. No new records were set, but the mean temperature of slightly below zero was the lowest of any month since January, 1930. On two days the maximum was above freezing and on four nights the minimum was above zero. Precipitation on 14 days amounted to 5.5 inches of snow. The ground was covered by snow all month and at the end of the month the average depth was about 8 inches. No high winds occurred, but the snow drifted in roads and trees and blocked some roads.

Maximum temperature, 38°; minimum, -32°; precipitation, 0.55 inch.

MANDAN:

Arboriculture - The year 1935 afforded an excellent opportunity for studying the ability of the various tree species under test to withstand severe drought conditions. Siberian pea-tree, ash, Russian olive, elm, buckthorn, chokecherry, red cedar, blue spruce, Englemann spruce, Douglas fir, and western yellow pine species have maintained good survivals in station plantings. Very heavy to complete losses occurred in birch, poplar, willow, jack pine, Scotch pine, Black Hills spruce, white spruce, pincherry, sumac, native plum, soft maple, mountain ash, and larch species. In farm plantings the following survivals were found in the shelterbelts visited:

Species	Age years	Survival percent
Willow	20	4.0
Poplar	20	3.0
"	15	11.5
"	10	26.0
"	5	70.3
Boxelder	20	60.9
"	15	65.3
"	10	68.0
"	5	75.5
Ash	20	82.4
"	15	71.8
"	10	76.9
"	5	83.9
Caragana	20	83.3
"	10	84.2
"	5	69.5
Russian olive	10	45.1
" "	5	76.8
Chokecherry	15	83.4
"	5	80.1
Chinese elm	10	79.3
" "	5	64.0

Six hardwood species were used in making new 1935 plantings, which established an average stand of 90.7 per cent. Four coniferous species were used in 1935 for making additions to older plantings, which established an average stand of 36.6 per cent. Drought conditions during the late summer caused most of the coniferous losses. Excellent stands were found during June and July.

The month of January was cold throughout, and one of the coldest of record for the station. There were 28 days when the minimum temperature was below zero, and 14 days with the maximum below zero. The mean temperature for the month was -5°, compared with -6° in 1916 and -5° in 1929. There were no hard winds during the month.

The snowfall for the month was 8.25 inches. The main highways in this area were open practically all the time.

Maximum temperature, 29°; minimum, -29°; precipitation, 0.61 inch.

BELLE FOURCHE:

The weather was cloudy and unsettled throughout most of January, and the last half of the month was abnormally cold and stormy. A total of 20 inches snow, yielding 1.12 inches precipitation, was received. This is third to the heaviest precipitation for January in the 28 years of record, and it is 0.70 inch greater than the average for the month. Precipitation was recorded on 10 days between January 16 and 31, but most of the 18 inches snow received during the period came in heavy storms on January 16, 21, and 23. A warm wind on January 21 and 22 caused some drifting and packing of snow, and high winds on January 25, 28, 29, and 30 drifted the snow badly, blocking all highways and leaving cultivated fields nearly bare.

The mean temperature for January was 10°, which is 7° below normal. During the last half of the month, maximum temperatures ranged from 1° to 33°; and minimum temperatures, from -25° to 4°, zero or subzero temperatures occurring on 13 days. Temperatures of zero or lower were recorded on 17 days during the month.

The weather was too cold throughout the month to permit further germination or growth of fall grains, but all crops were well protected by snow during the periods of abnormally cold weather. Very little wind accompanied the snow storms, and losses of livestock on the range were no heavier than normal, but considerable feeding will probably be necessary during the remainder of the winter.

Maximum temperature, 41°; minimum, -25°; precipitation, 1.12 inches.

ARCHER:

On the whole the weather during January was mild and dry with no general severe soil blowing. Precipitation occurred at four different periods. Six other snow flurries occurred but were so light as to make it difficult to track a rabbit more than a couple of jumps. The precipitation, however, moistened the dry grass and was helpful to grazing cattle.

Winter cereals are holding their own. At the station the rabbits, which were damaging the winter wheat, have greatly decreased in numbers, shooting being one factor in this matter. Poison was of little value.

W. P. A. work on the reservoir dam and the transplanting of trees continued. Most of the trees were pines dug from the shelter belt north of the farmstead and planted to the south of the farm buildings.

Maximum temperature, 59°; minimum, -8°; precipitation, 0.06 inch.

AKRON:

Open, mild weather, so characteristic of the winter, continued until the 25th, when there was a sharp change to appreciably lower mean temperatures. The lowest temperature of the present winter was -8° on the 17th. There were only two consecutive below zero readings of this cold-snap, however. The present series of colder weather has recorded minimums very close to zero each day and -5° on the 28th and 23th.

There has been a very even scattering of light snowfalls over the month with a maximum fall of 0.09 inch of precipitation on the 7th. There was a total of six measurable snowfalls.

In the nursery, where there are several winter-spring wheat hybrids, there was visual evidence at the end of the month of severe winterkilling. The surface planted winter wheat plots on the rotations also look bad by comparison at this time.

Maximum temperature, 56°; minimum, -8°; precipitation, 0.29 inch.

NORTH PLATTE:

This part of the Plains during January was singularly free of extremely low temperatures and severe storms that prevailed in eastern Nebraska, and the States further east. The mean temperature of 18.9° is only 4° below the long-time average. The absolute minimum was -10°. Below zero records were made on 13 days. Precipitation was only 0.48 inch. Fields have been partially covered with snow most of the time, but the covering is too light to furnish much protection for fall seeded grain or alfalfa. Procuring good grade corn for feeding trials and for summer storage continues to be a problem.

COLBY:

January was generally dry with some light snows, fairly cold, but pleasant for the most part, with no extreme temperatures and no bad storms or high winds. The mean temperature was below normal, but the maximum was somewhat above normal and the minimum was somewhat below normal. The maximum temperature was 67° on the 11th, and the minimum was -5° on the 7th. The days were moderately warm and the nights were moderately cold with no extremes either way. One night the wind blew fairly hard while it was snowing. Precipitation was recorded on 7 days mostly in the form of light snows.

The ground has been frozen some during the entire month. The last week it has been frozen hard, and numerous cracks are showing everywhere. The wheat has been frozen brown down to the ground, so it does not show up much. It is still in good condition generally.

Maximum temperature, 67°; minimum, -5°; precipitation, 0.14 inch; snow, 1.6 inches.

HAYS:

Generally speaking, January was a cold, dry month, both temperature and precipitation being slightly below normal. There were no severe storms and no wind, except for very few short periods of moderate velocity. The ground has been frozen too much to permit any tillage, and the water in the stream running through the Station was covered most of the month with ice sufficiently thick for skating, the maximum thickness of the ice being 12 to 14 inches.

The top growth of winter wheat is brown and has been throughout the month. There is practically no wheat pasture in this vicinity.

Although there has been no soil movement in this locality, the surface soil is mellowing to the extent that there is some danger of soil drifting should heavy winds occur. Soil drifting has been reported a few days in counties southwest of Ellis County.

Maximum temperature, 60°; minimum, -1°; precipitation, 0.15 inch; snow, 1.7 inches.

TUCUMCARI:

Although the mean temperature for January was slightly below normal, there were no extremes of temperature and the lowest recorded was 5°. Precipitation of 0.63 inch all fell in the form of snow, and was over twice the normal. Wind movement was approximately normal, with no high winds. The month was unusually favorable for outside work, with the exception of a few days when snow covered the ground.

Livestock are wintering in good condition, and wheat on the plains portion of the county is said to be very good. Much of the surrounding locality has received more precipitation the past few months than the station has.

Dry-land plots produced fair yields in 1935, surprisingly high when it is remembered the total precipitation for 1934 was only 6.13 inches and the total for 1935, 12.88 inches.

Below are given assembled yields, all dry-land plots, for 1935 as compared with the long-time average. In most cases the average is 21-year, 1914-34.

Crop		1935 average	Long-time average
Dwarf yellow milo	bushels	26.6	25.9
Sunrise kafir	"	20.4	18.9
Mexican June corn	"	18.4	15.2
Sumac sorgo,	total pounds	8688	5948
	Grain "	1174	------

Crop		1935 average	Long-time average
Cowpeas, hay	pounds	1563	1965
Broomcorn, brush	"	323	390
Cotton, lint	"	223	116
Beans	bushels	4.5	6.0
Peanuts, nuts	pounds	1420	801
Sudan grass, cured hay	"	1930	3584

DALHART:

The temperatures for the month were alternately mild and cold. The cold waves were of short duration, although sustained cold at relatively high minimums was the rule. The mean temperature for the month was 31°, which was 2° below the normal. Two snows during the month gave a total of 0.37 of an inch. The total snowfall was 5 inches, which is more than had been received during the preceding three years. Temperatures were sufficiently mild so that winter wheat and rye which were seeded late because of the dry fall emerged to just about full stands by the end of the month. Wind movement was near normal but was never such that any soil blowing occurred.

Maximum temperature, 68°; minimum, -1°; precipitation, 0.37 inch.

BIG SPRING.

The only precipitation received during the month was that from a snow and sleet storm when 0.16 inch was recorded. This was of little or no value, as it merely wet the surface of the soil and was soon lost by evaporation. Minimum temperatures during the month were consistently lower than normal, but temperatures have generally moderated during the day.

Work during the month consisted chiefly of plowing and listing. The fields to be used in the cooperative work were plowed, and that used for increase milo and sorgo was listed. Other work consisted of threshing and cleaning grain and forage sorghum seed and ginning cotton.

Maximum temperature, 77°; minimum, 10°; precipitation, 0.16 inch.

LAWTON:

Southwestern Oklahoma escaped the severe winter storms of snow and subzero temperatures that were so common throughout the country during January. Minimum temperatures were below freezing each night during the month and ranged from 4° to 31°. Maximum temperatures ranged from 27° to 74°. The mean January temperature was 34.9° or only 2.9° below normal. Three snow flurries were recorded, and the total precipitation for the month was 0.07 inch.

Surface moisture in the soil is deficient, and there is some concern among farmers about the survival of fall seeded oats and barley. Some snow accompanied the low temperature of 4° on the 29th and neither crop appears to be critically injured as yet. Farmers have complained of the lack of growth of wheat during the winter, but the crop seems to be in a healthy condition. The lack of growth has conserved moisture to some extent, and the crop should

renew early spring growth in good condition.

Farm operations during the month have been confined largely to the preparation of seed beds for oats whenever the weather was at all favorable. The first seeding of oats in the rate and date test was made January 24.

Current studies of chinch bug hibernation reveal slightly fewer bugs than were present one year ago. Hibernation is chiefly confined to sorghum stubble that remained green until frost, winter barley, and to such grasses as switch grass, little bluestem, big bluestem, and Johnson grass.

PENDLETON:

During the first 27 days of January temperatures were considerably above normal, then cold weather suddenly descended on this section, with a drop of 33° in 6 hours. Fortunately the ground was covered with about 5 inches of snow, protecting the winter wheat. The warm weather during January caused the fruit growers much concern, as the buds were starting to swell, but cold rains about the middle of the month checked the growth of the fruit buds. A measurable amount of precipitation, mostly in the form of rain, occurred on 19 days, with 0.58 inch, the greatest amount in a 24-hour period. Snowfall occurred on 4 days totaling 6.5 inches. Precipitation during January was 3.54 inches or more than double the normal of 1.62 inches. Very little run-off occurred due to the lack of heavy rains. Stubble ground is now saturated to a depth of 3 feet, fallow land is wet to a depth of at least 6 feet.

Some plowing was done on the station during January. Maximum temperature, 54°; minimum, -8°; precipitation, 3.54 inches; precipitation since September 1, 1935, 7.13 inches.

- - - - - - - - -